What School Personnel Should Know About the Student with Diabetes

General Information

Diabetes in youth is caused by the body's inability to make insulin. This causes a high glucose level in the blood. In children, it can be treated with a combination of insulin injections, meal planning, and exercise. Diabetes is not caused from eating "too much sugar," and is not contagious. Children with diabetes can participate in all school activities and should not be considered different from other students. It is essential that school personnel have conferences with parents early in each school year to obtain more specific information about the individual child and his or her specific needs.

Hypoglycemia (Low blood glucose)

One of the concerns during school time is that the child's blood glucose level might drop too low. This is called hypoglycemia and may be referred to as an "insulin reaction". This situation is most likely to occur: 1) when meals or snacks are missed or delayed, 2) participating in a strenuous physical activity just before lunch, or 3) during a lengthy field trip or field day activity. Students are individuals and may exhibit any of the symptoms listed below.

Warning Signs of Hypoglycemia

Objective Signs (can be observed)

- Sweating
- Paleness
- Irritable/Moody
- Crying
- Inability to Concentrate
- Poor Coordination
- Inappropriate Actions/Responses
- Child appears to have unusual drowsiness and fatigue

Subjective Signs (reported by child)

- Sudden Hunger
- Headache
- Nervousness
- Shakiness
- Confusion
- Abdominal Pain
- Unusual Drowsiness or Fatigue

Treatment

Hypoglycemia is a medical emergency and requires prompt attention. Treatment should be given immediately and when in doubt, treat! **Do not send the child to the office alone, or leave the child unattended at any time.** If possible test the blood glucose. If less than 80 mg/dl, give one of the following items. If unable to test blood glucose, treat anyway with one item from the choices below.

- Glucose tablets chew 3-4, followed by water
- Juice 1/2 cup (4-6 ounces)
- Milk 1 cup (1 school sized carton)
- Regular soda pop (not diet) 1/2 can

The **teacher or school staff must remain with the student** until the student is more responsive and can resume normal activity. The student's symptoms should improve within 15 minutes. If not, repeat treatment. Once the symptoms subside, if it will be longer than one half-hour before the next meal or snack, give a small snack such as crackers or milk.

If the student is conscious, but less cooperative or disoriented, use glucose gel (Insta-Glucose). Lay the student on his/her side and squeeze 1/2 to 1 tube in the inside of the student's mouth (in the cheek). Once the student is cooperative and oriented, follow glucose gel with a small snack such as crackers or milk.

If the student is unconscious or having a seizure, call 911 immediately. Notify the parents.

Hyperglycemia

Sometimes the child's blood glucose will go too high. This is hyperglycemia. (high blood glucose) It may be due to: 1) illness, 2) eating too much, 3) missed insulin dose, or 4) stress. The child will be extremely thirsty and will urinate more than normal. If these symptoms **persist**, and the child's blood glucose is high (>300 mg/dl), notify the parents. If this becomes a problem and interferes with the child's daily activities, notify the parents.

Meal Plan / Carbohydrate Counting

The meal plan is an important component of diabetes management. It is essential that the child be as consistent as possible in following his or her meal plan. Most children require a mid-morning and mid-afternoon snack to prevent their blood glucose level from dropping too low. Preventing or forgetting a snack may lead to hypoglycemia and be dangerous. The child may also need a snack if the class is going to participate in any strenuous activities. It is best not to have a physical education class scheduled just before lunch. If possible, the child should not have a late lunch period.

School Adaptation & Achievement

Treat the child normally. A child with diabetes can participate in all classroom and physical education activities. While the fact that he or she has diabetes should not be hidden, the child does not want to be singled out for special treatment. A quiet understanding should exist between the school and the child about his or her diabetes and how to handle it.

** See attached individualized care plan for specific diabetes management guidelines.**

Developed by an ad hoc committee of the Utah Diabetes Control Program, Advisory Board, including: Colleen Drake, RN, CSN; Caroline Green, RN, BSN, CHES; Sherrie Hardy, MS, RD, CDE; Dawn Higley, RN, MS, CDE; Kandy Hillam, RN, BSN, CDE; Lucie Jarrett, APRN, MS, CDE; Paula Johnson, RN, BSN, Carol Rasmussen, RNC, CDE; and Virginia Sanchez, RN, BS.

This publication was supported by Cooperative Agreement Number U32/CCU815668-03 from the CDC. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.